

GPower IO-Link for TestStand

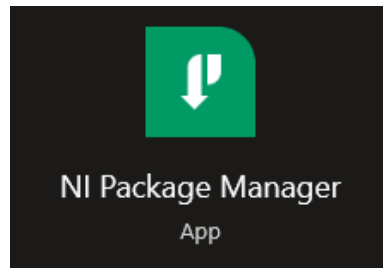
GETTING STARTED

<https://gpower.io/en/products/io-link-labview-teststand/>

Installation

Install the GPower IO-Link toolkit for TestStand NI package by running the “install.exe” file.

Install the package for your TestStand version. TestStand 2019 and newer is supported.



License

Product Name

Client ID


IO-Link TestStand v2.1.1 (Development)

Manage License

License ID Password

Activation Key Have Key ☐

License State: New (0 days remaining)

Client ID 

Copy to clipboard

When running the GPower IO-Link toolkit TestStand functions for the first time, the user will be prompted with a license dialog.

Using the IO-Link step Edit dialogues requires a Development License.

Running a test sequence with IO-Link steps using the LabVIEW runtime adapter requires a deployment or development license.

A **trial** license can be activated once per client and activates the product for 30 days.

If a **trial** has already been activated, this option is no longer available.

Supported Masters - Interfaces

ModbusTCP

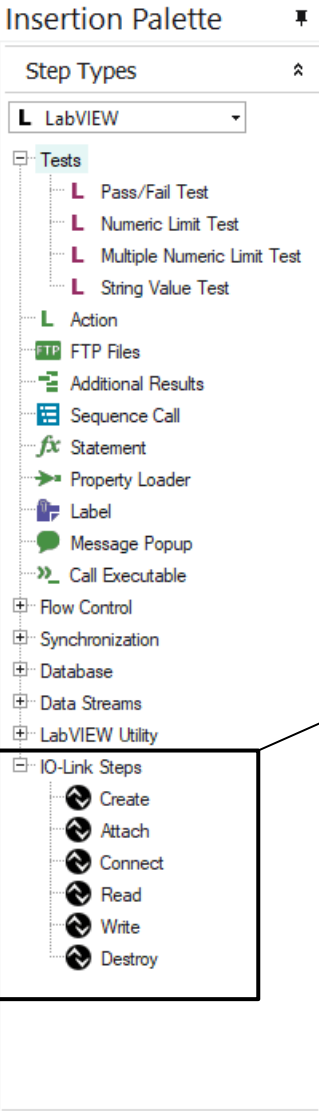
- **Pepperl+Fuchs SE**
 - ICE2-8IOL-G65L-V1D
 - ICE2-8IOL-K45P-RJ45
 - ICE2-8IOL-K45S-RJ45
 - ICE3-8IOL-G65L-V1D
 - ICE3-8IOL-K45P-RJ45
 - ICE3-8IOL-K45S-RJ45
- **PHOENIX CONTACT**
 - I/O module – IOL MA8 EIP D18
- **Carlo Gavazzi**
 - YL212CEI8M1IO
 - YL212CPN8M1IO
 - YN115CEI8RPIO
 - YN115CPN8RPIO
- **CONTROL**
 - IOLM 4-EIP
 - IOLM 8-EIP
 - IOLM 8-EIP-L
- **Datalogic**
 - CBX-8IOL Master
- **Baumer**
 - IO-Link Master PROFINET (11215447)
 - IO-Link Master PROFINET (11215445)

IOT

- **ifm**
 - AL13xx Series
 - AL14xx Series
 - AL19xx Series

N.b. Enable MODBUS TCP on the Master using the website of the Master.

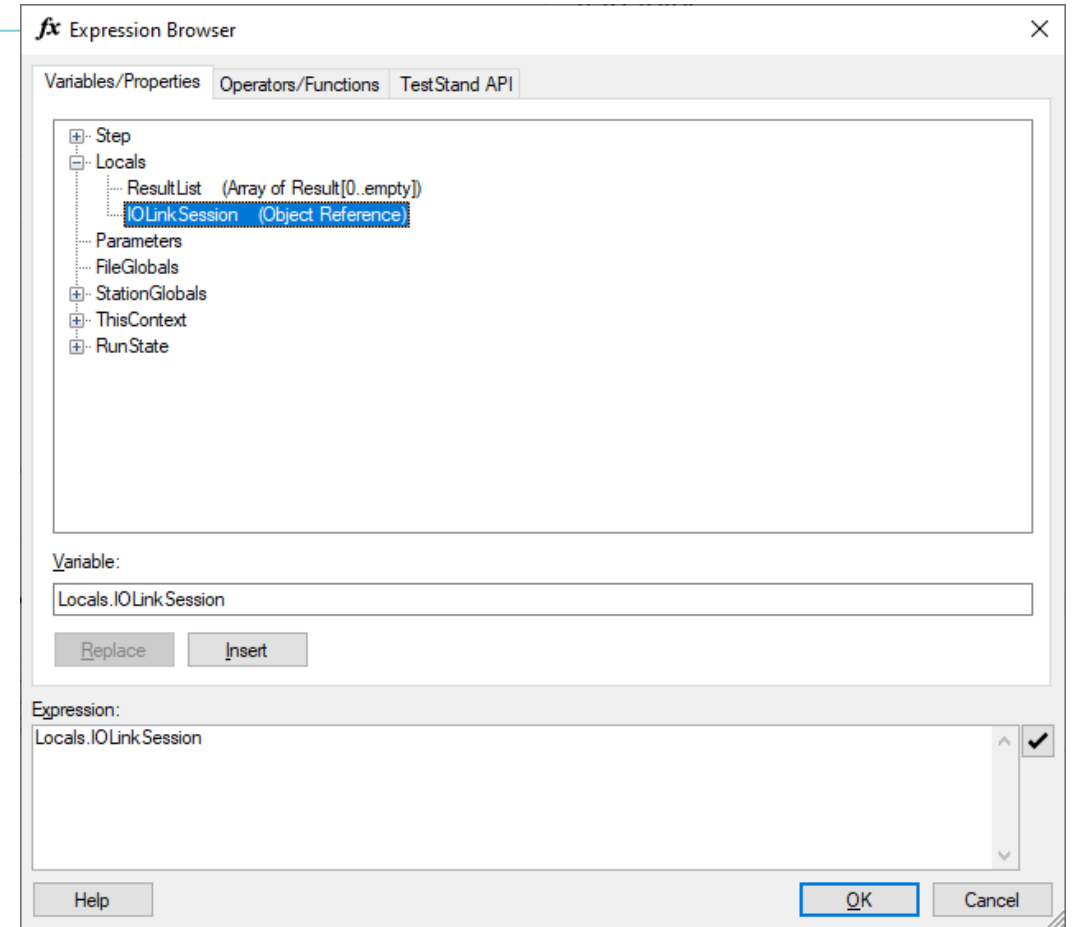
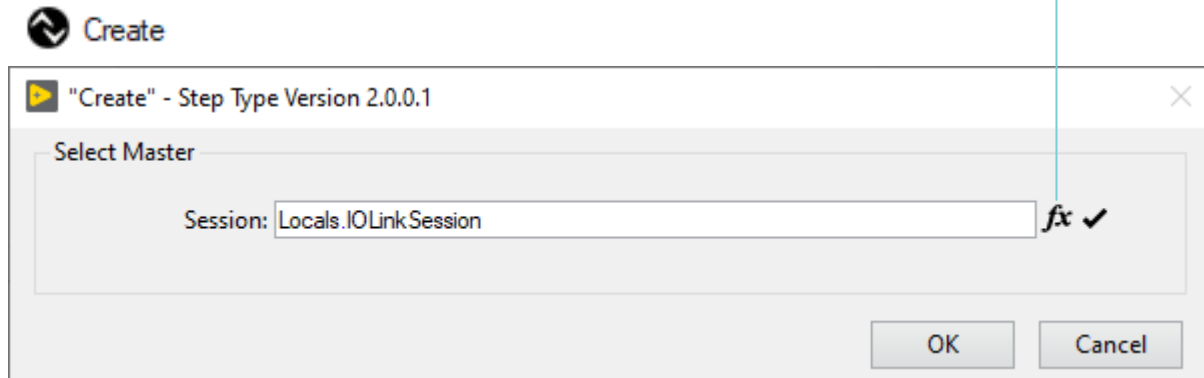
GPower IO-Link TestStand Custom step type Palette



Create	Creates the IO-Link Session
Attach	Assign IODDs files to channels
Connect	Connect to a supported IO-Link Master
Read	Read an IO-Link parameter
Write	Write an IO-Link parameter
Destroy	Disconnect master and close Session.

Create

Create IO-Link Session object reference



Attach

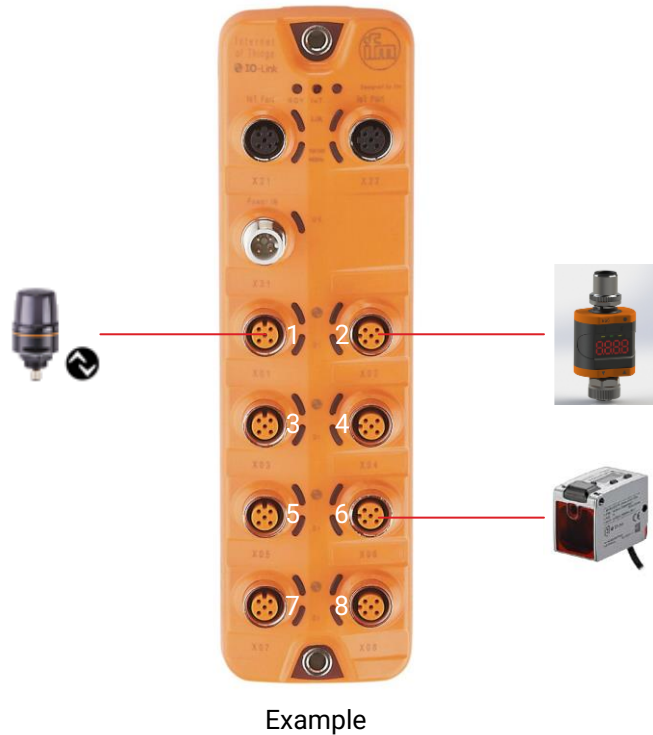
Assign IODDs files to channels



Devices To Attach:

Device Number	IODD File Path
1	C:\IODD Files\ifm DV2131\IFM-000498-20200325-IODD1.1.xml
2	C:\IODD Files\ifm DP2200\ifm-000262-20160907-IODD1.1.xml
6	C:\IODD Files\KEYENCE_LR-T_V1_3_IODD-V1_1\KEYENCE-LR-T-20160819-IODD1.1.xml
0	
0	
0	
0	
0	

New Line



Example

Connect

Connect to a supported IO-Link Master



"Connect" - Step Type Version 2.0.0.3

Connect To Physical Master

Session: *fx* ✓

Select Master Type: Select Master:

IOT Connection Parameters

URL: Verify Server: ☒

User Name: Password:

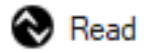
Cookie File: ...

OK Cancel

Test Test

Read



Read an IO-Link parameter




"Read" - Step Type Version 2.1.0.0

Read Parameter





Session: *fx* ✓

Device Number:  

Parameter Name: 

KEYENCE-LR-T-20160819-IODD1.1.xml

Parameter Elements:

	Distance (UIntegerT)	Locals.Distance
		
		
		



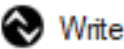
Laser distance sensor

Distance			✕
Values And Ranges	Data Type	Bit Length	
49:Near 50~9998 9999:No Distance	UIntegerT	16	

Parameter information

Write

Write an IO-Link parameter



"Write" - Step Type Version 2.1.0.0

Write Device Parameters

Session: Locals.IOLinkSession

fx ✓

Device Number: 1

IFM-000498-20200325-IODD1.1.xml

Parameter Name: RGBModeOut

Select IODD File

Condition: Operating mode=1 (RGB-mode).

Parameter Elements:

i

Buzzer Style (UIntegerT)

1

i

Buzzer (BooleanT)

Locals.BuzzerON

i

Seg. Appearance (UIntegerT)

3

i

Seg. Color (UIntegerT)

8



1-segment signal lamp with Buzzer

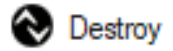
Seg. Color

Values And Ranges	Data Type	Bit Length
0:off 1:red 2:green 3:amber 4:blue 5:purple 6:cyan 7:white 8:yellow	UIntegerT	4

Parameter information

Destroy

Disconnect master and close Session.



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